BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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In the Matter of Northern States Power Company's Petition for Approval of a Distributed Generation Energy Tariff

ISSUE DATE: July 29, 2002

DOCKET NO. E-002/M-01-937

ORDER APPROVING TARIFF WITH MODIFICATIONS

PROCEDURAL HISTORY

On June 12, 2000, the Commission issued its order approving the merger of Northern States Power Company (NSP) and New Century Energies, Inc. to form Xcel Energy.[1] As part of that order, the Commission approved the agreements that NSP had made with the Izaak Walton League of America (IWLA), the Minnesota Department of Commerce (the Department), the Minnesota Office of the Attorney General's Residential and Small Business Utilities Division (OAG-RUD) and Minnesotans for an Energy Efficient Economy (ME3). In these agreements, NSP had agreed to file a distributed generation (DG) tariff with the Commission.

On June 1, 2001, NSP d/b/a Xcel Energy filed its proposed Distributed Generation Energy Tariff.

On October 12, 2001, the Commission received comments on NSP's filing from the Department, Reliant Energy Minnegasco (Reliant), Hennepin County, and jointly from IWLA and ME3. While all parties expressed reservations, the Department generally supported the filing.

On December 19, the Commission received reply comments from Hennepin County, the Department, Reliant, OAG-RUD and NSP.

The matter came before the Commission on April 25, 2002.

FINDINGS AND CONCLUSIONS

I. Background[2]

Generally, electricity is generated at large central power plants, then transmitted to where it is needed. "Distributed generation," in contrast, refers to the practice of generating electricity with

[1] *In the Matter of the Application of Northern States Power Company for Approval to Merge with New Century Energies, Inc.*, Docent No. E,G-002/PA-99-1031 ORDER APPROVING MERGER AS CONDITIONED.

[2] See *In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities Under MN Laws 2001, Chapter 212,* Docket No. E-999/CI-01-1023 ORDER INITIATING DOCKET.

multiple, smaller, geographically disbursed plants, sometimes close to the load they are designed to serve. Many benefits have been attributed to distributed generation, including reducing the demand on long-distance transmission lines, enhancing system reliability, and increasing customer choice.

The potential for these benefits would be lost, however, if the process of connecting small generators to the electric grid proved too dangerous or the process of negotiating such connections proved too burdensome. These barriers could be lowered if electric utilities would file tariffs establishing a standardized process for generators to follow to secure interconnection. This is the goal sought by IWLA, the Department, OAG-RUD and ME3.

This goal is also favored by the Legislature. In 2001 a new statute took effect directing the Commission –

> to establish, by order, generic standards for utility tariffs for the interconnection and parallel operation of distributed generation fueled by natural gas or a renewable fuel, or another similarly clean fuel or combination of fuels of no more than ten megawatts of interconnected capacity.

Minnesota Statutes § 216B.1611, subdivision 2(a). On August 20, 2001, the Commission initiated a generic DG docket for developing such standards.[3]

II. Filing summary

NSP said that it prepared its filing with the goal of –

- Standardizing and streamlining the process of negotiating an interconnection with NSP's system, including setting the terms under which NSP would buy electricity from the generator;
- Compensating the generator for the savings that it provides to NSP, including avoided fuel costs and deferred capital costs;
- Maintaining NSP system's safety and reliability; and
- Avoiding adverse impacts to other customers.

NSP's proposed tariff had a number of restrictions. It was offered only to Minnesota NSP retail customers who want to build, own and operate their own stationary DG projects, and who are not otherwise engaged in the energy business. The tariff would not apply to a generator having more than two megawatts (MW) of power or interconnecting with NSP's system at more that 35 kilovolts (kV). NSP would stop accepting new DG projects under the tariff once NSP had accepted projects with combined capacities of 20 MW. NSP could decline to interconnect a project to a given feeder line if another project were already interconnected to that feeder. And NSP proposed a number of technical restrictions to promote safety and reliability. For example, NSP would require the applicant's engineering and electrical subcontractors have at least $5 million of errors and omissions insurance naming NSP as an additional insured party.

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[3] *Id.*

As envisioned by NSP, a customer wishing to develop a DG project would submit a completed application form and appropriate application fee. NSP would then have 65 days in which to conduct an interconnection study to evaluate the project's feasibility, although certain projects could be approved without such a study. NSP would gradually develop a list of approved equipment for DG, which would help reduce study costs and times.

The tariff would only apply to a generator that would sign the standard interconnection agreement and standard purchase power agreement (PPA).[4] Under the PPA, the generator would sell all its electricity to NSP and buy any needed energy from NSP. NSP would buy electricity at its avoided costs for capacity and for energy. In addition, if a DG project permitted NSP to avoid or delay a capital expenditure, NSP would give the generator credit for the savings.

III. Procedural Issues

A. Party positions

Hennepin County, OAG-RUD, ME3 and IWLA advocate consolidating the current docket with the generic DG docket. They argue that consolidation would permit the parties to use their resources more efficiently: The issues raised by NSP's filing could best be addressed within the larger context of the generic DG docket, and any decision rendered in the current docket would ultimately need to be re-considered in light of the standards resulting from the generic docket.

The Department argues that consolidating the dockets would significantly delay NSP's implementation of a DG tariff.

NSP generally opposes consolidation, noting the differences between the scope of its proposed DG tariff and the scope of the new statutory DG standards. Among other things, the statute directs the Commission to develop generic standards for DG up to 10 MW of capacity, whereas NSP's tariff only address projects of up to 2 MW. Standards designed to address larger projects, and a broader range of projects, must necessarily incorporate different provisions than those in NSP's filings in the current docket.

B. Commission action

The Commission will decline to consolidate the two dockets. Consolidation would, in effect, simply close the current docket. The generic DG docket includes parties that have not participated in the current docket; providing them with an opportunity to participate would basically require re-starting the current docket. In addition, the goal of creating generic standards, applicable to all electric companies, would act as a needless constraint on NSP's proposal. Any concessions that IWLA, the Department, OAG-RUD or ME3 had negotiated with NSP, and any concessions that NSP were willing to make unilaterally today, would have little relevance in an industry-wide docket.

Nevertheless, the Commission appreciates the parties' concerns for administrative efficiency, and will therefore make some accommodation. While the Commission declines to refer all issues in the current docket to the generic docket, it will refer some. Specifically, the Commission will

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[4]Minnesota Rule part 7835.9910 provides a standard form contract for use with the purchase of power from generating facilities smaller than 40 kW. Generators in this category would have the option to operate under the standard form contract or NSP's proposed tariff.

adopt some form of DG tariff in the current docket, but contentious issues will be referred to the generic docket. NSP may need to modify its DG tariff once the generic standards are adopted, but that is not a sufficient basis to deprive generators of the benefit of some form of DG tariff in the meantime. No matter how imperfect NSP's tariff may seem in retrospect, it will be better than no tariff at all.

The Commission will now proceed to adopt the best DG terms presented by the record of this case. The circumstances of this decision, however, prompt the Commission to take two additional steps.

First, given the degree of dispute in this docket, the Commission concludes that this matter warrants a second look, whatever decisions the Commission makes today. The Commission anticipates that this second look will come when the generic docket is resolved. As a safeguard, however, the Commission will adopt Reliant's suggestion to direct NSP bring this matter back to the Commission's attention. Specifically, the Commission will direct NSP to monitor DG activity and to file a report in two years reviewing the experiences of customers, vendors and service providers in deploying DG. The report should give particular focus to technical and safety-related procedures and their impact on the cost and difficulty of DG deployment.

Second, the Commission hereby clarifies that the DG terms established by this order should not necessarily be regarded as a template or precedent for future DG tariffs.

IV. Substantive issues

The parties raise a number of substantive issues with NSP's proposal. The Commission will address seven of them below.

A. Limits on location

As noted above, NSP asserts that limiting the number of DG projects per feeder would help ensure the "distributed" nature of DG, thus maintaining the overall reliability of NSP's system. Hennepin County, IWLA, OAG-RUD, ME3 and Reliant argue that a prohibition on more than one project per feeder is needlessly restrictive. Instead, they urge NSP to explore the effects of adding additional DG projects on a case-by-case basis. If someone wants to interconnect a DG plant to a feeder that is already connected to such a plant, Reliant argues, then NSP could explore the effects of such a proposal on reliability as part of the interconnection study.

NSP clarifies that it did not mean to establish a blanket prohibition on having more than one DG project per feeder. NSP merely meant to put potential generators on notice that it may need to limit the number of DG projects on a feeder in the interest of maintaining system reliability. The Commission finds NSP's clarification reasonable.

B. Ownership requirement

Hennepin County, IWLA, the Department, OAG-RUD, ME3 and Reliant do not see the merit of restricting the tariff to people who are not otherwise engaged in the energy business, and who are the majority owners of their proposed DG plants. Common industry practice involves financing DG projects by giving developers an equity interest in the project. The parties argue that NSP's restriction would foreclose many potential projects.

In response, NSP offers to modify these restrictions to simply require that the a DG customer be an owner of the DG equipment. The Commission finds this accommodation reasonable.

C. Stationary installation requirement

IWLA and ME3 do not see the merit of restricting the tariff to "permanently installed" generators. (NSP Petition, Attachment 1 at 1, "Qualification 4"). They note the role that mobile generators can play in supporting the electric system. NSP concedes this point generally, but expresses concern about recovering certain one-time costs of interconnecting with a generator.

To accommodate the concerns of all parties, NSP proposes to expand the scope of its tariff to apply to mobile generators, provided that NSP can be assured of recovering its interconnection costs. The Commission finds this resolution reasonable and will approve it.

D. Limits on total amount of DG power permitted under tariff

By its terms, NSP's proposed tariff would not be available to new DG projects after NSP has approved other DG projects under the tariff with a combined generating capacity of 20 megawatts (MW). Parties argue that this 20 MW limit is needlessly restrictive.

NSP had proposed the 20 MW limit as a precaution due to its inexperience with this type of DG. In the course of the hearing, however, NSP agreed to waive the 20 MW cap. The Commission finds this accommodation reasonable, and will approve it.

E. Complicated interconnection standards

NSP's initial filing consisted of –

- a proposed tariff,
- a model interconnection agreement,
- a table of tasks to be performed in an interconnection study, and justifications for those tasks,
- a check-list of tasks to be performed in an interconnection study,
- a flow-chart for applying for a DG project under the tariff,
- a 57-page document labeled "Interconnection Guidelines for Parallel Operation of Distribution Connected Customer-Owned Generation,"
- a preliminary application form,
- a final application form, and
- a price list for conducting interconnection studies.

Hennepin County, IWLA, ME3 and Reliant argue that these standards are too lengthy and complicated, and may discourage potential generators. They contrast NSP's proposed interconnection agreement with the Commission-approved Small Wind Tariff[5] which involved a three-page interconnection agreement.

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[5] *In the Matter of Northern States Power Company's Petition for Approval of a Small Wind Energy Tariff*, Docket No. E-002/M-00-1747 ORDER APPROVING TARIFF WITH MODIFICATIONS (August 10, 2001).

Reliant in particular argues that applying the technical limitations and safety provisions to every project is needlessly burdensome, and that a case-by-case engineering analysis would be a better way to establish appropriate safeguards. In addition, Reliant regards the 65-day period for conducting an interconnection study as excessive.

IWLA and ME3 note that NSP's proposal fails to reference the standards for photovoltaic (solar) power established by the leading standards organizations, the Institute of Electrical and Electronics Engineers, Inc. (IEEE Standard No. 929) and Underwriters Laboratories (UL Standard No. 1741). Finally, the Department joins ILWA and ME3 in advocating for the adopting of IEEE Model Interconnection Standard No. 1547.

NSP agrees to make certain changes requested by the parties. For example, NSP agrees to shorten certain documents and incorporate references to IEEE 929 and UL 1741. And, while IEEE 1547 is still under development, NSP agrees to incorporate references to those standards when they are finalized.

But NSP opposes other proposed changes. The purpose of all these documents, according to NSP, is to clarify the rights and responsibilities of the parties. NSP notes that much of the documentation is provided for the edification of the applicant, describing how NSP will respond to an application. The information requested in the application and service agreement form is necessary for the interconnection process. The 65-day period for conducting the interconnection study is 25% less than the time provided by the Federal Energy Regulatory Commission (FERC) for transmission interconnections. In an effort to further respond to the parties' concerns, NSP offers to work with them in the context of the generic docket to resolve these matters.

The Commission finds NSP's accommodations and proposals reasonable for purposes of the current docket, and will approve them.

F. Buy All/Sell All clause

Hennepin County, IWLA, the OAG-RUD, ME3 and Reliant oppose NSP's requirement that "the customer is obligated to sell to the Company all electricity generated by the DG facility pursuant to the terms, conditions and price schedule of the PPA." (NSP Petition, Attachment 1 at 2.) They argue for letting generators use the electricity they generate. NSP's requirement could be costly to the generator because NSP proposes to buy electricity from the DG at less than the price it would sell electricity to the generator. Also, because these sales would be wholesale transactions, they might fall within FERC's jurisdiction, triggering the need for the generator to make filings there. In support of this option, Reliant argues that NSP should offer generators its Supplemental Service, designed to provide power whenever the generator is not providing enough power to supply meet its own needs.

NSP disputes many of the commentors' complaints, and notes that generators are free to negotiate different arrangements if they do not want to accept the terms of a proposed tariff. Moreover, NSP clarifies its Buy All/Sell All clause as follows: Generators that elect to interconnect with NSP's system using its standard interconnection agreement need not accept the standard PPA. Instead, they may elect to receive service pursuant to any of NSP's tariffs for self-generating customers.

NSP also proposes to amend the proposed PPA. Under the new PPA, NSP could agree to buy a generator's excess capacity provided the generator agrees to buy NSP's Standby and Supplemental Service to back up the generator's load. NSP's Standby and Supplemental Service tariff provides for, among other things, adequate metering to accommodate the purchase of excess capacity.

The Commission finds NSP's accommodations and proposals reasonable, and will approve them.

G. Liability insurance

Hennepin County, IWLA, the Department, and ME3 oppose NSP's proposal to require an applicant's engineering and electrical subcontractors to have $5 million of errors and omissions insurance. The parties characterize this proposal as an inappropriate effort to amend Minnesota's existing contractor certification process, and warn that it could needlessly burden DG projects.

NSP argues that the $5 million figure was developed in consultation with its risk management department. NSP is often named as a defendant in personal injury cases, and NSP seeks to cause the responsible parties to bear the risk of their own actions. In addition, NSP notes that it proposes a $300,000 liability limit for projects of 100 kW or less.

Nevertheless, during the hearing NSP agreed to reduce the amount of insurance an engineering and electrical subcontractor would need to carry to $1 million. The Commission finds this accommodation reflects a reasonable balancing of concerns, and will approve it.

H. Other issues

On the record of the case as it exists currently, the Commission finds that NSP's DG proposal is adequate without additional changes, except as noted above. But the Commission again emphasizes the role of administrative efficiency in bringing the current docket to resolution. Again, the decisions in this docket should not be understood as prejudicing the generic docket, and parties should feel free to take issues from the current docket and raise them anew in the next docket.

The Commission will so order.

ORDER

1. NSP's proposed Distributed Generation Energy Tariff is approved as modified in its written comments, with the following additional changes:

    - Remove the 20 MW restriction on participation.

    - Do not require applicant engineering and subcontractors to have more than $1 million of liability insurance listing NSP as an additional insured party.

2. NSP shall monitor DG activity and file a report with the Commission after two years that reviews customer, vendor and service provider experiences in DG deployment, with a particular focus on technical and safety-related procedures and their impact on the cost and difficulty of DG deployment.

3. NSP’s tariff shall not constitute precedent for distributed generation energy tariffs or guidelines being developed in Docket No. E-999/CI-01-1023 *In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities under Minnesota Laws 2001, Chapter 212.*

4. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary

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